

# IMPLEMENTING LOCAL AGENCY SAFETY MANAGEMENT

*"A Partnership to save lives and reduce collisions  
on county roads and city streets."*



## **What is a Safety Management System?**

A Safety Management System (SMS) gives decision makers and those who manage and maintain local roadways the tools to systematically identify, prioritize, correct, and evaluate the performance of their transportation safety investments.

## **What is the goal of a Safety Management System?**

The goal of a SMS is to assist local agency engineers, managers, elected officials, and enforcement and emergency medical services personnel in their efforts to reduce both fatalities and the severity and frequency of collisions.

## **Why is a Safety Management System a good idea?**

Collisions cause loss of life, injuries, and property damage.

An average of 115 people died each day in motor vehicle crashes in 2001 — one person every 12 minutes.

A study conducted by the National Highway Traffic Safety Administration (NHTSA) estimated that the economic cost alone of motor vehicle crashes in 2000 was \$230.6 billion. In 2001, 42,116 people were killed in the estimated 6,323,000 police reported motor vehicle traffic crashes, 3,033,000 people were injured, and 4,282,000 crashes involved property damage only. "These costs reflect wage loss from injuries, medical expenses, insurance administration costs, property damage, and claims for personal and property damage."

For local agencies to mount a successful effort toward reducing motor vehicle collisions and their costs, an effective systematic approach must be taken.

## **What are the benefits of a Safety Management System?**

The primary benefits of an SMS are saved lives and reduced injuries.

Recognizing that "one size does not fit all," the SMS is structured to allow each agency to implement the system within the agency's resource limitations and focus on the elements that are most appropriate for the agency's size, goals and priorities.

Although the SMS might reside with a particular agency it is not agency focused. It is a collaborative, community-focused effort that takes into consideration more than the roadway. It also includes the vehicle and driver in determining safety needs and solutions, and treats emergency services, law enforcement, and education as equal players with engineering.

The existence of a working, effective SMS tailored to local policy promotes a collaborative approach to development of sound safety practices. Looking beyond economics, an SMS provides a variety of other benefits no less important. An SMS can also increase the capability of reducing the number and severity of collisions by focusing attention on safety needs that will result in a higher payback.

Other benefits include improved maintenance of safety investments and greater certainty that the highest priority needs are identified.



# INTEGRATING DRIVER VEHICLE & ROADWAY

## 1. Local Policy

Policy officially authorized and adopted by elected officials. Establishes operating guidelines and goals for service providers.

## 2. Data Collection

Data and information used in policy development, planning, design, construction and maintenance of transportation facilities, vehicles, and driver education.

## 3. Data Analysis

Data and information processing through sorting, technical analysis, study, alternative mitigation analysis, and prioritization.

## 4. System Output

Conclusive data products, data analysis, and application of adopted policy.

## 5. Decisions

Budget and program adoption by elected officials, including all efforts toward safety during the following year.

## 6. Project Implementation

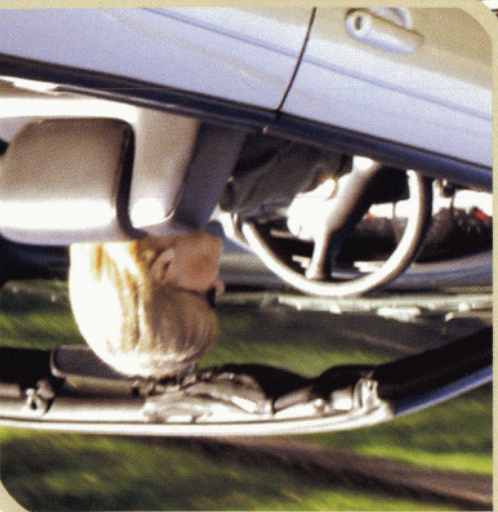
Execution of funded work efforts resulting in safety enhancements of all kinds.

## 7. Monitoring Performance

Measures and analyzes results, providing information from which out-year efforts are forecast & evaluated, and the work program is developed.

## 8. Annual Safety Report

Reports the results of safety system work efforts and expenditures.





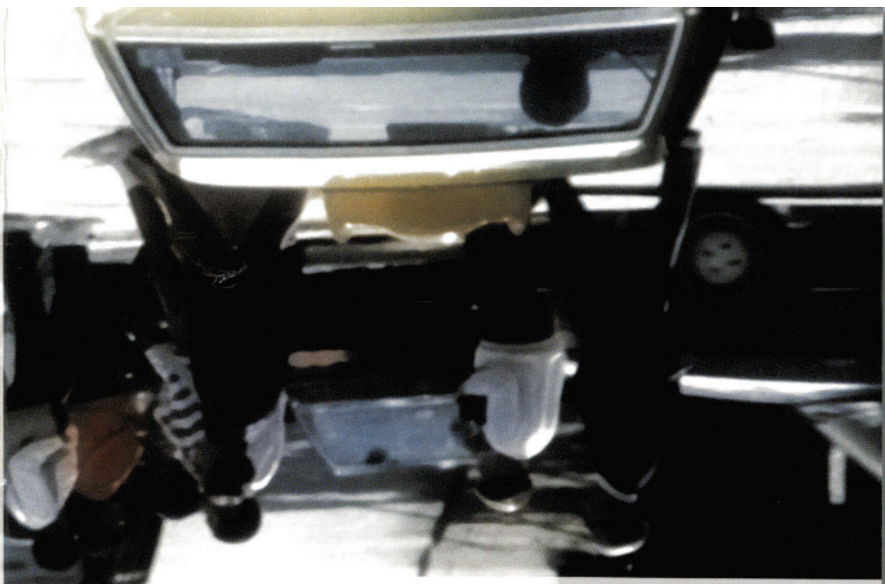
## How does the SMS work?

The SMS has two basic components: a collaborative information exchange network and an eight-element transportation safety decision support process.

The information network centers on the SMS Committee. The SMS Committee is a standing, cross-disciplinary advisory committee that meets regularly and includes representation from all major transportation safety stakeholders in the community. The Committee provides a permanent forum to identify transportation safety needs through a collaborative process and the potential resources to meet those needs. The regular meetings provide a forum to hear all voices, and a synergistic tool to identify creative solutions and leverage resources.

The SMS process emphasizes the relationship between drivers, vehicles, and roadways by integrating engineering, education, enforcement and emergency services into a safety programs architecture. The collaboration of engineering, enforcement, emergency services and education creates a broader safety networking resource for an agency and the community it serves.

The SMS relies on an 8-step systematic needs assessment process including feedback to evaluate the results of a safety program's efforts and expenditures. The feedback system completes the loop by creating a report or series of reports used by decision makers to identify policies to be changed, safety needs to emphasize, assumptions to be modified and funding needs to be increased or shifted.



**Kenneth Epstein, P.E.,**  
FHWA contact for Safety Management Systems.  
Federal Highway Administration Office of Safety.  
(202) 366-2157 or by email:  
kenneth.epstein@fhwa.dot.gov

U. S. Department of Transportation  
**Federal Highway Administration**  
FHWA-SA-03-025



**Washington State**  
Department of Transportation



**Daniel L. Sunde, P.E.,**  
WST2 Technology Transfer Engineer  
**David Sorensen**  
WST2 Traffic Technology Engineer

**The Washington State**  
Technology Transfer Center  
Prepared by

For additional information about  
Safety Management Systems, contact  
Dave Sorensen at (360) 705-7385 or by email:  
sorensd@wsdot.wa.gov/TA/T2Center/  
[http://www.wsdot.wa.gov/TA/T2Center/  
Mgt.Systems/SafetyTechnology/](http://www.wsdot.wa.gov/TA/T2Center/Mgt.Systems/SafetyTechnology/)

**"A Partnership to save lives and reduce collisions on county roads and city streets."**

